AMENDMENTS TO THE CLAIMS

Claims 1-40. (Canceled.)

41. (Currently amended) A vessel filter including a conductor loop that forms the inductance of an electrical resonance circuit, wherein the conductor loop (11a, 11b; 21a-f; 41) is a unitary piece, wherein a basic framework of the vessel filter (10; 20; 40) is formed by the conductor loop (11a; 11b; 21a-f; 41) ~~and forms the vessel filter (10; 20; 40)~~, and wherein the electrical resonance circuit has a resonance frequency that corresponds to the frequency of an external magnetic field of an ~~MR tomorgraph~~ magnetic resonance tomograph, so that the conductor loop (11a; 11b; 21a-f; 41) is used both to form the actual filter and for the inductance .

42. (Previously presented) The vessel filter according to Claim 41, wherein there is at least one integrated circuit coupled to the resonance circuit so that it is adjustable or tunable by the integrated circuit.

43. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a-f; 41) has individual sections (14, 14a-d; 24; 301a-c; 44) and spacers and/or insulators, in which the spacers and/or insulators keep the individual sections (14, 14a-d; 24; 301a-c; 44) of the conductor loop at a spacing from each other and/or insulate them relative to each other.

44. (Previously presented) The vessel filter according to Claim 43, wherein the insulators simultaneously form an internal capacitance in conjunction with at least one conductor loop (11a, 11b; 21a-f; 41).

45. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a-f; 41) is enclosed with a nonconductor.

46. (Previously presented) The vessel filter according to Claim 45, which further includes a capacitance that is adjusted via the nonconductor with a certain layer thickness.

47. (Canceled)

48. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a-f; 41) has at least one electrically nonconducting material, on whose surface at least one conductor material.

49. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a-f; 41) is deployable.

50. (Previously presented) The vessel filter according to Claim 49, wherein the conductor loop (11a, 11b; 21a-f; 41) is deployable during and/or after implantation in a body.

51. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a-f; 41) has several conductor loop windings (14, 14a-d) guided so that the conductor loop (11a, 11b; 21a-f; 41) forms an elongated base (12a-e) that is sealed on at least one side with a screen-like filter cage (13a-d).

52. (Previously presented) The vessel filter according to Claim 41, wherein the vessel filter (20; 40) includes a plurality of conductor loop windings (24a-c; 301a-e, 304, 304b; 44) guided so that the greatest spacing of the conductor loop windings (24a-c; 301a-e, 304, 304b; 44) from each other is present in the center of the vessel filter (24; 40) and has a reduced spacing of the conductor loop windings (24a-c, 301a-e, 304, 304b; 44) from each other on at least one edge side.

53. (Previously presented) The vessel filter according to Claim 52, wherein the spacing of the conductor loops windings (24a-c; 301a-e, 304, 304b; 44) from each other is reduced toward edge sides relative to the center of the vessel filter (20; 40).

54. (Previously presented) The vessel filter according to Claim 41, wherein the vessel filter (40) includes a plurality of conductor loop windings (44) that merge on one side of the filter in a filter cage (53) and extend to the other side of the filter.

55. (Previously presented) The vessel filter according to Claim 41, wherein the vessel filter (40) has at least one conductor loop winding (44) forming at least one extension (46) that serves for connection of the filter to a vessel wall.

56. (Previously presented) The vessel filter according to Claim 55, wherein adjacent regions of the conductor loop winding (44) are guided at spacing from each other in extension (46).

57. (Previously presented) The vessel filter according to Claim 55, wherein adjacent regions of conductor loop winding (44) are connected without intermediate space to each other in extension (46).

58. (Previously presented) The vessel filter according to Claim 41, wherein the vessel filter (10; 20; 40) forms a double-filter in which the respective ends of the conductor loops each form a filter cage (13a, 13b; 22a, 22b).

59. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop (21a, 21b, 21d-f; 41) has individual windings that extend in the longitudinal direction of the vessel filter (10; 20; 40).

60. (Previously presented) The vessel filter according to Claim 41, wherein the vessel filter (10; 20; 40) has at least one brace (47) which is connected to conductor loop (11a, 11b; 21a, 21b, 21d-f; 41).

61. (Previously presented) The vessel filter according to Claim 60, wherein said at least one brace (47) is conducting and is connected conducting with said conductor loop (11a, 11b; 21a, 21b, 21d-f; 41).

62. (Previously presented) The vessel filter according to Claim 60, wherein said at least one brace (47) is movably connected to individual conductor loop windings (44).

63. (Previously presented) The vessel filter according to Claim 55 which further includes at least one brace (47) for fastening of the vessel filter, wherein said extension (46) is moveably arranged relative to brace (47).

64. (Previously presented) The vessel filter according to Claim 60, wherein said at least one brace (47) is made of bioresorbable material.

65. (Previously presented) The vessel filter according to Claim 41 which further includes at least one semiconductor element that is formed on said vessel filter (10; 20; 40).

66. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a, 21b, 21d-f; 41) is formed from a single material piece .

67. (Previously presented) The vessel filter according to Claim 41, wherein the one conductor loop (11a, 11b; 21a, 21b, 21d-f; 41) is produced by repeated lengthwise cutting of a tube (309) and then expansion.

68. (Previously presented) The vessel filter according to Claim 66, wherein the conductor loop (11a, 11b; 21a, 21b, 21d-f; 41) is guided on the ends of the single material piece .

69. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop includes windings (14, 14a-d; 24; 301a-c; 44) that are joined on the ends.

70. (Previously presented) The vessel filter according to Claim 69, wherein at least one conductor loop winding (14, 14a-d; 24; 301a-c; 44) is provided with at least one hook for fastening in a vessel wall.

71. (Previously presented) The vessel filter according to Claim 41, wherein the vessel filter (10; 20; 40) has at least one connection device (28, 28a; 48a, 48b) for coupling to a device for introduction and/or extraction of the filter.

72. (Previously presented) The vessel filter according to Claim 41, wherein the vessel filter (10; 20; 40) contains at least one connection device (28a) constructed and arranged for braking of the filter during introduction into the body.

73. (Previously presented) The vessel filter according to Claim 71, wherein the connection device (28, 28a; 48a, 48b) is constructed and arranged so that it simultaneously creates a braking device (28a) for the braking of the filter during introduction into the body.